Patent claims

1. A thermoplastic molding composition comprising

A) from 10 to 99.99% by weight of at least one thermoplastic polyester,
B) from 0.01 to 50% by weight of a highly branched or hyperbranched polycarbonate having an OH number of from 1 to 600 mg KOH/g of polycarbonate (to DIN 53240, Part 2),
C) from 0 to 60% by weight of other additives,

where the total of the percentages by weight of components A) to C) is 100%.

2. The thermoplastic molding composition according to claim 1, in which component B) has a number-average molar mass M_n of from 100 to 15 000 g/mol.

3. The thermoplastic molding composition according to claim 1 or 2, in which component B) has a glass transition temperature Tg of from -80°C to 140°C.

4. The thermoplastic molding composition according to claims 1 to 3, in which component B) has a viscosity (mPas) at 23°C (to DIN 53019) of from 50 to 200 000.

5. The thermoplastic molding composition according to claims 1 to 4, in which component B) is obtainable via a process which encompasses at least the following steps:

a) reacting at least one organic carbonate (A) of the general formula $RO[(CO)]_nOR$ with at least one aliphatic, aliphatic/aromatic or aromatic alcohol (B) which has at least 3 OH groups, with elimination of alcohols ROH to give one or more condensates (K), where each R, independently of the others, is a straight-chain or branched aliphatic, aromatic/aliphatic or aromatic hydrocarbon radical having from 1 to 20 carbon atoms, and where the radicals R may also be connected to one another to form a ring, and n is an integer between 1 and 5, or

ab) reacting phosgene, diphosgene or triphosgene with abovementioned alcohol (B), with elimination of hydrogen chloride,

and

b) intermolecular reaction of the condensates (K) to give a highly functional, highly branched, or highly functional, hyperbranched polycarbonate,

where the quantitative proportion of the OH groups to the carbonates in the reaction mixture is selected in such a way that the condensates (K) have an average of either one carbonate group and more than one OH group or one OH group and more than one carbonate group.

6. The thermoplastic molding composition according to claims 1 to 4, in which component B) is obtainable according to claim 5, where the reaction mixture also encompasses at least one alcohol (B') having two OH groups, with the proviso that the average total OH functionality of all of the alcohols used is greater than 2.

7. The thermoplastic molding composition according to claims 1 to 4, in which component B) is obtainable according to claim 5 or 6, where the resultant highly functional, highly branched, or highly functional, hyperbranched polycarbonate is reacted, in an additional step (step c)), with a suitable functionalizing reagent which can react with the OH and/or carbonate groups of the polycarbonate.

8. The thermoplastic molding composition according to claims 1 to 4, in which component B) is obtainable according to claim 5 or 6 or 7, where the highly functional, highly branched, or highly functional, hyperbranched polycarbonate is modified by carrying out step b) in the presence of additional compounds which have not only OH groups or carbonate groups but also other functional groups or functional elements.

9. The use of the thermoplastic molding compositions according to claims 1 to 8 for producing fibers, films, or moldings of any type.

10. A fiber, a film, or a molding of any type obtainable from the thermoplastic molding compositions according to claims 1 to 8.